

Notice of Allowability

Application No.

10/607,207

Examiner

(Nancy) Thanh-Nhan P. Nguyen

Applicant(s)

YOON, SUNGHOE

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/17/2005.
2. ☒ The allowed claim(s) is/are 1-10, 12-29 and 32-35.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>6/17/05; 1/21/04</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Since the title of the invention is not descriptive, a new title is required that is clearly indicative of the invention to which the claims are directed.

The title has been changed to: "Liquid Crystal Display Device Having Cholesteric Liquid Crystal Polarizing Film and Internal Retardation Film and Internal Polarizing Film"

2. This communication is responsive to the Request for Continued Examination (RCE) dated 6/17/2005.

3. Claims 11 and 30-31 are cancelled; claims 1-10, 12-29 and 32-35 are pending for examination.

4. Claims 1-10, 12-29 and 32-35 are allowed.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Moon U.S. Patent Application Publication No. 2001/0026335 discloses the CLC polarizer reflects the circularly light opposite with CLC color filter.

b. Anderson et al U.S. Patent No. 6,061,108 discloses the CLC polarizing film having largest pitch (first pitch) closest to the light source.

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c. Jiang et al U.S. Patent Application Publication No. 2001/0055083 discloses a reflective liquid crystal display device comprising an inner retardation film.

d. Jones et al U.S. Patent Application Publication No. 2002/0163616 discloses a liquid crystal display device comprising an internal polarizer.

6. The following is an examiner's statement of reasons for allowance:

Applicant's claimed invention distinguishes over the prior art for the following reasons. The claims are allowable over the prior art of record because none of the references, either alone or in combination, discloses or renders obvious a liquid crystal display device comprising a first substrate having an inner surface and an outer surface; a second substrate having an inner surface and an outer surface, wherein the inner surface of the second substrate faces and is spaced apart from the inner surface of the first substrate; a backlight unit behind the outer surface of the second substrate; a retardation film arranged on the inner surface of the second substrate; a second polarizing film arranged on the retardation film; a cholesteric liquid crystal polarizing film arranged between the second substrate and the backlight unit, wherein the cholesteric liquid crystal polarizing film includes a first portion adjacent to the backlight unit, a second portion adjacent to the outer surface of the second substrate, and a third portion between the first and second portions, wherein the first portion includes a first pitch, wherein the second portion includes a second pitch, wherein the third portion includes a

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third pitch, wherein a value of the third pitch is between values of the first and second pitches.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to (Nancy) Thanh-Nhan P Nguyen whose telephone number is 571-272-1673. The examiner can normally be reached on M-F/9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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(Nancy) Thanh-Nhan P Nguyen

Examiner

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-- October 6, 2005 --

TN

Andrew Schechter
ANDREW SCHECHTER
PRIMARY EXAMINER